

IN THE UNITED STATES PATENT AND TM OFFICE

Appn. No.	09/755,231	
Filing Date	01/08/01	
Applicant	Sekendur, Oral F.	
Appn. Title	One-Piece Disposable Dental Articulator	
Examiner	Lucchesi, Nicholas	Mailed: 11/05/09
Group	3300	Chicago, IL
Art Unit	3763	

United States Department of Commerce
United States Patents and Trademark Office
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

1. Formal drawings will be provided when application is allowed.
2. Applicant restates and re-alleges his most recent Response to Office Action previously mailed on or about 7/10/03.
3. Applicant respectfully disagrees with Examiner's grounds for detailed office action mailed 08/05/2009. This action states, *"Although applicant argues that he is unaware of the use of multiple hinges in the art, it is well known that dental articulators may include more than one hinge, to allow greater flexibility and range of motion (in multiple planes) of both upper and lower models. Applicant's argument that the inclusion of multiple hinges would render an articulator useless has been considered, but is not persuasive."* Multiple hinge articulators of the type disclosed in the present application do not exist. There exist only multiple jointed articulators that comprise two side-by-side joints working in unison rotationally moving on a single plane to simulate the two joints (temporomandibular joints) of the human jaw. This movement cannot be achieved by adding an additional hinge working in *"multiple planes"*, where two hinges work independently on separate planes, without the unique features disclosed in the present application. *"[G]reater flexibility and range of motion (in multiple planes) of both upper and lower models"* will not work without the unique features disclosed in the present application. For one, dental articulators are intended to imitate movement of the human jaw. Movement *"in multiple planes"* defeats this purpose,

Date: 11/05/09
Applicant



and will result in the complete disorientation of the occlusal relationship of the upper and lower dental models. Without the features to guide the occlusal relationship of the upper and lower models, there is no way to determine how the teeth in the upper and lower models come into contact and move in relation to each other. Among other things, features to simulate occlusal and masticatory motions are disclosed in the present application, including giving “the dental professional a choice of using the upper hinge or lower hinge axis. The upper hinge is used by breaching the connection at the upper body retention holes to allow free movement of the upper hinge. Alternatively, the lower hinge can be used by breaching the connection at the lower body retention holes to allow free movement of the lower hinge.” [0032]. Further, “either hinge axis can be used” “by folding either the upper member FIG. 2b, lower member FIG. 2c or both upper member and lower member FIG. 2d flush against the body member.” [0033] Still further, “configurations in FIGS. 2a-2d, comprise a passive vertical stop 20 when the upper articulated model 11 or lower articulated model 12 comes to rest flush against the body member preventing further movement along the upper hinge or lower hinge axis in the direction of the body member.” [0034] Even still further, there are numerous other unique features to the upper and/or lower hinge axes throughout the instant application that disclose the movement of the upper and/or lower axes, and/or aid in guiding their occlusal relationship, including but not limited to the following or any combination thereof: “adjustable vertical stops” [0035], “mounting plates” [0036], “articulated models sandwiched between said at least one mounting plate” [0037], and “an L shaped lower body member 19 in FIG. 7 and an upper hinge 5 whereby the only moving part is the upper hinge and the “L” shaped lower body member comprises a single solid piece.” [0038]. Without the unique features disclosed in the present application, there is no way to determine the accurate occlusal relationship.

4. Applicant respectfully disagrees with Examiner’s statement that “*Hudson et al disclose a dental articulator which may be formed as one-piece*”. The present application discloses dental articulator embodiments “capable of being manufactured inexpensively by forming them from a single sheet of plastic without the use of costly molds or casts”. [0041] “The present invention uses a dental articulator 1 in FIG. 1 constructed in one-piece from a single sheet of plastic that is scored perpendicular to the vertical length of the dental articulator a the

upper and lower quadrants ..." [0030] Hudson et al does not "disclose a dental articulator which may be formed as one-piece". Hudson et al discloses at least three pieces including "tray-like parts 11, 12" (col. 2, ln. 6) and "hinge plate 13" (col. 2, ln. 9). Further, the present application specifically discloses "a single sheet of plastic without the use of costly molds or casts" [0041], as opposed to Hudson et al, which specifically states, "the tray-like parts 11, 12 are molded from synthetic plastics material". (col. 2, lns. 6-7) Further, Hudson et al states that the "lower tray-like part 12 differs from the upper such part in two material respects." (col. 1, lns. 63-64) The present application does not disclose multiple molded parts different from each other. Further, the present application does not disclose a molded articulator or the use of any mold whatsoever, but discloses "dental articulator embodiments" "manufactured inexpensively by forming them from a single sheet of plastic without the use of costly molds or casts." [0041]

5. The present application discloses, in part, a dental articulator for making a "dental restoration". [0006]. Hudson et al does not disclose a dental articulator for making a dental restoration, but instead discloses a dental articulator "to provide a simple, yet effective, support structure which will facilitate the examination, comparison or shaping of dental models and will provide an accurate diagnostic aid. According to the present invention, a support structure for use in orthodontics ..." (col. 1, lns. 6-13) Hudson et al discloses only a diagnostic aid for viewing a model of a patient's existing teeth. Hudson et al discloses no means to guide the occlusal relationship, and therefore cannot be used to make a dental prosthesis, in part because it does not provide, nor intends to provide a means to guide the occlusal relationship, because it is not intended for use in the aid of construction of a dental prosthesis. The device disclosed in Hudson et al is only intended for use with a diagnostic model, and therefore does not need disclose features to guide the occlusal relationship. The present application discloses various features to guide the occlusal relationship, including those described above.

6. For reasons stated above and in prior responses to office actions, Applicant argues that the amended claims in the present invention clearly and specifically point out differences from the cited prior art, including Hudson et al.

7. Applicant respectfully requests the Examiner write claims pursuant to MPEP 707.07(j).

Date: 11/05/09

Applicant

